HEADQUARTERS UNITED STATES FORCES INDIA BURMA THEATER

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31	Janu	ary	1945

CIRCULAR) : NO. 11)

MALARIA CONTROL

1. Rescissions:

- a. Circular Number 42, Rear Echelon Headquarters, United States Army Forces, China Burma India, dated 7 August 1943.
- b. Sections II and III, Circular Number 27, Rear Echelon Headquarters, United States Army Forces, China Burma India, dated 8 March 1944.
- c. Section II, Circular Number 33, Rear Echelon Head-quarters, United States Army Forces, China Burma India, dated 23 March 1944.
- d. Section IV, Circular Number 36, rear Echelon Head-quarters, United States Army Forces, China Burma India, dated 1 April 1944.
- e. Section II, Circular Number 86, Headquarters, United States Army Forces, China Burma India, dated 3 September 1944.

2. <u>References</u>:

- a. Section VI, AR 40-210.
- b. War Department Circular Number 223, dated 21 September 1943.
- 3. <u>General</u>. Malaria is still the most serious disease problem in the India Burma Theater. Because of the enormous loss of man power caused by new and recurrent cases, uniform and coordinated malaria control measures as directed below will be instituted immediately.

4. <u>Command Responsibility</u>.

- a. All commanding officers will be responsible for the establishment and maintenance of effective malaria discipline and education, and for the proper employment of personal protective measures within their commands. To assist in carrying out this program a local malaria control officer will be appointed in each post, camp, and station.
- b. The Commanding General, Services of Supply, United States Forces, India Burma Theater will supervise and coordinate all malaria control activities within the India Burma Theater.

- (1) He is responsible for all environmental ground malaria control within the Theater. He will furnish all necessary anti-malaria supplies, equipment and labor except those normally supplied by the Air Force, and will assign malaria control and survey units in such manner as to insure their maximum usefulness.
- (2) He will determine the areas requiring insect control by means of aircraft spraying operations and will set the priority for the order of spraying. He will call upon the Commanding General, Army Air Forces for aircraft spraying. He will assign an assistant malariologist and the ground personnel, equipment, and supplies necessary for coordinated air-ground malaria control operations.
- c. The Commanding General, Army Air Forces, India Burma Theater, will furnish aircraft and crews for insect control operations. He will carry out these operations in accordance with the requests of the Commanding General, Services of Supply.
- d. Headquarters responsible for the transportation of military personnel will make the necessary provisions for mosquito protection for all transient personnel coming under their jurisdiction. Such personnel will be briefed as to the hazards of travel and will be instructed in appropriate methods of personal protection prior to departure. They will be furnished anti-malaria supplies adequate for the trip, and will be kept under strict malaria discipline while enroute.
- 5. Theater Malariologist. The Theatre Malariologist will act as assistant to the Theater Surgeon, and will exercise staff supervision over all malaria control activities within the Theater. He will act as consultant and advisory agency in all matters pertaining to malaria control and will make such inspections as are necessary to insure that effective and coordinated malaria control is carried out within the Theater.
- 6. Anti-malaria Units. Personnel of malaria control and survey units will not be used for activities other than the control of malaria and mosquito borne diseases, except in special circumstances with the approval of the Commending General, Services of Supply.
- 7. Anti-malaria supplies and labor are regarded as having equal priority with other urgent military necessities.
- 8. <u>Malaria education and propaganda</u>. A continuous program of education will be carried out by all commanders to acquaint and remind all personnel of the ever present malaria hazard. Such education will stress the fact that malaria is preventable; that the first line of defense is the consistant use of personal

protective measures, and that the effects of malaria may be serious and long lasting.

- 9. Personal protective measures. These consist of the proper care and use of the bed net, the wearing of protective clothing after sunset, the use of repellents, the maintenance of mosquito proofing and the avoidance of unnecessary exposure to mosquito bites. This is the direct responsibility of each individual as well as the unit commander and represents the most important factor in the control of malaria. The enforcement of personal protective measures is a matter of discipline and, as such, is an index of the efficiency of the unit commander.
- 10. Anti-mosquito measures will be employed energetically by all unit commanders as prescribed in War Department Circular No. 223, dated 21 September 1943. In order to accomplish this work there will be formed in each company, battery or similar unit, an anti-malaria detail to consist of a minimum of two enlisted men, including one non-commissioned officer. These anti-malaria details will be properly instructed and will carry out ordinary anti-malaria measures in and immediately around the unit area. They will give special attention to the following:
 - a. Maintenance of mosquito proofing including bed nets.
 - b. Eradication of mosquito breeding within the unit area.
- c. Spray killing of mosquitoes within domestic quarters of the unit.
 - 11. Atabrine Suppressive Treatment. (AST)
- a. It has been amply proven that atabrine in the dosage prescribed below will prevent malaria attacks and can be taken with no adverse effects on the health of the individual. Effective immediately, atabrine in a dosage of 0.1 gram (1 tablet) daily (7 tablets a week) will be administered to the following:
 - (1) All personnel stationed within the geographical limits of Northern Combat Area Command, Advance Section No. 3, Intermediate Section No. 2 and the areas east of the Brahmaputra-Jamuna-Ganges or Padma Rivers. Troops on patrol and others subject to the risk of becoming isolated from their supply base will be issued sufficient atabrine to maintain suppressive treatment for at least a month. The tablets must be packaged in moisture proof containers. All personnel ordered to stations within the geographical limits of the areas designated above will be put under suppressive treatment immediately upon receipt of movement orders. The office publishing the order directing such troop movements will include

in the movement order a statement that atabrine suppressive treatment will be initiated immediately accordin to the following schedule: 0.1 gram (1 tablet atabrine daily for 5 days, followed by 0.2 grams (2 tablets) daily for 10 days whereupon the regular schedule of 0.1 gram daily will be resumed.

- (2) All personnel stationed elsewhere in the India Burma Theater, who, by the nature of their duties are exposed repeatedly to risk of infection in unprotected areas. The determination of the individuals and units who are thus exposed will be made by the commanding officer upon recommendation of the surgeon.
- (3) All personnel, irrespective of their duty or location in India Burma Theater who experience a recurrent attack of malaria and who, in the opinion of a medical officer, will continue to relapse unless put on suppressive treatment.
- b. Records of Atabrine Suppressive Treatment.(AST) When an enlisted man is placed on atabrine suppressive treatment the following notation "AST started on (Date) "will be made on page 1 of the Service Record. In the case of an officer the notation will be made on his Immunization Record. A similar notation will be made on the Certificate of Health furnished each individual being returned to the Zone of the Interior.
- c. Unless considered inadvisable by the Surgeon, personnel under atabrine suppressive treatment may discontinue treatment one month after they are no longer subjected to the conditions cited in paragraph lla(1) and (2). Personnel described in paragraph 11a(3) will continue on suppressive treatment so long as they remain in the India Burma Theater.
- d. All personnel on atabrine suppressive treatment who return to the Zone of Interior will continue to take one tablet daily until authorized to stop by competent authority in the Zone of Interior. Upon departure, unit commanders will issue these instructions explaining the importance of continuing treatment in order to prevent relapses enroute and will issue atabrine sufficient for the journey to the port. Port commanders will assure that instructions are understood and will issue atabrine sufficient for journey to the Zone of Interior.
- e. Suppressive atabrine will be given by roster, after a full meal, and under officer supervision. If, as in the case of small groups, an officer cannot be present, supervision over atabrine administration may have to be delegated to a non-commissioned officer or other dependable enlisted men. This will not relieve the commanding officer of his basic responsibility for

insuring regular suppressive treatment. Such supervision should not be delegated to Medical Department personnel except in the case of medical units. The supervising officer or non-commissioned officer has not discharged his responsibility until he has actually witnessed the swallowing of the tablet. If an individual on suppressive treatment fails to take a tablet of atabrine on one or more days he will take an additional tablet on each day following, until the total number that were missed have been taken. (e.g. if 3 tablets have been missed, two tablets will be taken daily for 3 days).

f. Good atabrine discipline will eliminate malaria casualties. When discipline is lax, "break-throughs" of malaria will occur in proportion to the failure to secure regular administration of the atabrine. In units under suppressive treatment the occurrence of malaria will be considered indicative of poor atabrine discipline. In such units an incidence of more than 3 cases of malaria per 1000 strength in any one week will be cause for investigation by the next higher headquarters. Corrective action will be taken in all cases.

12. Malaria Reports.

- a. Service of Supply area reports.
 - (1) A consolidated report will be prepared at the end of each month for the preceding month by the Surgeon of each SOS Base, Intermediate, and Advance Section and forwarded without delay, through command channels, to the Commanding General, Services of Supply, India Burma Theater. The report will contain information relative to the malaria control activities in all stations located within the geographical limits of the section. Quartermaster and engineer officers responsible for the issue of anti-malaria supplies will furnish the necessary data to complete the report.
 - (2) In all reports, successive commanders will indicate by indorsement thereon action taken on specified defects noted and upon recommendations made.
- b. Air Spraying Report. The Surgeon, Army Air Forces, India Burma Theater, will render a report to the Theater Surgeon on the activities of malaria control by aircraft during the preceding month.
- c. Individual Malaria Report. As soon as the diagnosis of malaria is definitely made on an individual at a dispensary or hospital, such dispensary or hospital will render an individual case report to the Surgeon of the section in which the individual is stationed. The following exception will be made: All cases originating in individuals stationed within the geographical limits of Northern Combat Area Command will be reported to the Surgeon

of Advance Section No. 3.

- d. Report forms: Blank Forms detailing information desired in the above reports are attached as inclosures 1, 2 and 3.
- 13. In this Theater there are avilable the supplies, the trained personnel, and the knowledge necessary to bring malaria under control. Complacency in this matter will not be tolerated. Failure to bring about satisfactory control of malaria in a command will be prima facie evidence of inefficiency on the part of the commander concerned.

By command of Lieutenant General SULTAN:

VERNON EVANS Brig. Gen., G.S.C. Chief of Staff.

3 Incls:

Incl. 2 - Ltr From, Subject: "Periodic Report on Air Spraying for the month of 194 ."

Incl. 3 - Form, Individual Malaria Report.

OFFICIAL:

FRANK MILANI, Colonel, A.G.D., Adjutant General.

HEADQUARTERS

			A.P.O194 .
SUBJECT:		iodic Report on Malaria Contr th of194 .	ol Activities for
TO :		manding General, Services of .T., A.P.O. 885.(Thru: Comma	
		aria Incidence as obtained by dispensaries in the section	-
	a.	Total new cases Total	recurrent cases
		P. vivax	
		P. falciparum	
		P. malariae	
		Mixed	
		Unclassified	
		Clinical	
of control		Number of new cases of malar area.	ia contracted outside
		(1) Contracted in transit _	·•
		(2) Contracted otherwise _	·
	C.	Complications of malaria:	
		No	. Cases No. Deaths
		Cerebral malaria	
		Blackwater fever	
		Other complications	
1000 per a		Units not on atabrine with r $\mathfrak n$.	ates over 156 per

<u>Unit</u> <u>APO</u> <u>Strength</u> <u>Total Cases No. Recurrences Rate</u>

e. Units on atabrine with rates over 156 per 1000 per annum.

<u>Unit APO Strength Total Cases No. Recurrences Rate</u>

- 2. Anti-malaria Supplies and Equipment. (See Annex #1)
- 3. <u>Mosquito Proofing</u>. (Inspection by malariologist)
 - a. Requirements.

Site No. Bldg. requiring mosquito proofing

- 4. <u>Anti-malaria Personnel</u>. (Distribution of units.Remarks)
- 5. <u>Malaria Surveys</u>. (Statistics obtained by Malaria Control Organization).
 - a. Mosquito studies:

<u>Species</u> <u>Positive</u> <u>Site</u> <u>Identified</u> <u>No. No. dissected</u> <u>Gut</u> <u>Gland</u>

b. Endemicity studies.

<u>Site</u> <u>Spleen rate</u> <u>Parasite rate</u>

6. Malaria Control Activities:

- a. General. Describe activities, including unusual situations encountered, new methods, and their practicability. Give complete status of labor situation. Inspections by malariologist.
- b. DDT control activities. Percentage of native and domestic quarters treated in the past 30 days with residual spray. Describe experiences in use of DDT, including its employment as larvicide and insecticide, methods of application, special problems.
- 7. <u>Malaria Discipline</u>. Including atabrine and individual protective measures.
 - 8. Recommendations.

For the Surgeon:

1 Incl:
Annex #1. - 2 -

Malariologist

Incl. #1 to Cir #11 Hq, USF, IBT.

ANNEX #1

nths Estimated requirements Anti-Malaria Equipment and Supplies
Consumed
Or

<u>Item</u>	Unit	or Issued	On hand	Enroute	requirements for next 2 mon
Insecticide, aerosal, 1 pound dispenser	ea sr				
nt, insect tock No 51	Bottle	Φ.			
0 4	Ф Ф				
0	1b				
powder 51-L-12	1b				
Pyrethrum concentrate	gal				
Paris Green, standard larvacide (Stock No 41-7839, 7-7)	1b				
Duster, Paris green blower type (Stock No 41-3113.5-10)	e B				
pare par	set				
Sprayer, insect, knapsack type, 5 gal (Stock No 41-7839.5-5)	e e				
Spare parts for above duster	set				
Sprayer, insect, power (Stock No 40-9030-6-3)	Ф Ф				
are	set				
-H O	sq. ft				
Mosquito netting	sq. f	T			

HEADQUARTERS ARMY AIR FORCES INDIA BURMA THEATER Office of The Surgeon:

SUBJE	CT:	Periodic Report on Air Spraying for the month of194 .
TO	:	Theater Surgeon, U.S.F., I.B.T., A.P.O. 885.
	1.	Areas sprayed during month of
<u>Site</u>	<u>Sq</u>	. Mileage Ots. per acre Amount of DDT used Flying Hours
	2.	Supply status.
		a. On hand.
		b. Required for next three months.
	3.	Equipment.
	4.	Comments.
		For The Surgeon:
		Malariologist

Incl: #2 to Cir #11, Hqs, USF, IBT.

INDIVIDUAL MALARIA REPORT

		Date		
1.	. Patient's NameR	ank	Hosp No	
2.	. Company and Organization			
3.	. Location of Unit			
4.	. How long at present location			
5.	. Where was last station if here leads	ss tha	n one month	
6.	. Were they any night travel or act symptoms ?		-	-
7.				
8.	. Did he employ regularly (a) Mosqu	ito ba	r	
	(b) Prote	ctive	clothing	
9.	. Are quarters screened, and screen Are quarters sprayed regularly	ina in	good repair	
10.	. Suppressive treatment		_Duration	
11.	. Has he had malaria before	No.	of attacks	
	Date of last attack			
12.	. Diagnosis (a) P. falciparum (b) P. vivax (c) P. malariae (d) Mixed (e) Specied undetermined (f) Clinical Diagnosis only	7 •		
	. Reported by: Name Organization Date			
14.	. Remarks:			

Incl. #3 to Cir #11, Hqs, USF, IBT.